UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

DEC 27 2013

REPLY TO THE ATTENTION OF:

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Kevin Jacko
Plant Manager
Diversified Machine Inc.
5353 Wilcox Street
Montague, Michigan 49437

Re: Notice of Violation and Finding of Violation under 42 U.S.C. § 7413(a)(1) and (a)(3)

Dear Mr. Jacko:

The U.S. Environmental Protection Agency is issuing the enclosed Notice of Violation and Finding of Violation (NOV/FOV) to Diversified Machine Inc. (DMI) for violations of the Clean Air Act (CAA) identified at the facility located at 5353 Wilcox Street, Montague, Michigan (Facility). The NOV/FOV is issued in accordance with Sections 113(a)(1) and 113(a)(3) of the CAA, 42 U.S.C. § 7413(a)(1) and (a)(3).

As outlined in the NOV/FOV, the EPA finds that DMI has violated the CAA, the Michigan State Implementation Plan (SIP), the Facility's Permits to Install, and the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Secondary Aluminum Production at the Facility. Section 113 of the CAA, 42 U.S.C. § 7413, gives us several enforcement options to resolve these violations. These options include issuing an administrative compliance order, issuing an administrative penalty order, and bringing a judicial civil action.

We are offering you an opportunity to confer with us about the violations alleged in the NOV/FOV. The conference will give you an opportunity to present information on the specific findings of violation, any efforts you have taken to comply, and the steps you will take to prevent future violations.

Please plan for your facility's technical and management personnel to attend the conference to discuss compliance measures and commitments. You may have an attorney represent you at this conference.

The EPA contact in this matter is Alexandra Letuchy. You may call her at (312) 886-6035 to request a conference. You should make the request within 10 calendar days following receipt of this letter. We should hold any conference within 30 calendar days following receipt of this letter.

Sincerely,

George T. Czerniak
Director
Air and Radiation Division

Enclosure

cc: Heidi Hollenbach
Air Quality Division Grand Rapids District
Michigan Department of Environmental Quality

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF: **Diversified Machine Inc.** **Montague, Michigan**	)	Proceeding Pursuant to the Clean Air Act, 42 U.S.C. §§ 7401-7671q **EPA-5-14-MI-05**

NOTICE AND FINDING OF VIOLATION

The U.S. Environmental Protection Agency is issuing this Notice of Violation and Finding of Violation (NOV/FOV) to Diversified Machine Inc. (DMI) to notify you that we have found violations of the Clean Air Act, 42 U.S.C. §§ 7401-7671q (CAA) at the facility located at 5353 Wilcox Street in Montague, Michigan (Facility). The relevant statutory and regulatory background, factual background, alleged violations, and environmental impact of these violations are set forth in detail below.

This NOV/FOV is issued in accordance with Section 113(a)(1) and (a)(3) of the CAA, 42 U.S.C. § 7413(a)(1) and (a)(3), which authorize the Administrator to take certain enforcement actions after notifying a "person," as defined in Section 302(e) of the CAA, 42 U.S.C. § 7602(e), that it is in violation of the CAA. The authority to issue this NOV/FOV has been delegated by the Administrator to the Regional Administrator and re-delegated to the Director of the Air and Radiation Division for Region 5 of the EPA.

Relevant Statutory and Regulatory Background

National Emission Standards for Hazardous Air Pollutants

1. Section 112 of the CAA, 42 U.S.C. § 7412(c), requires the EPA to promulgate a list of all categories and subcategories of new and existing "major sources" of hazardous air pollutants (HAPs), and establish emissions standards for the categories and subcategories. These emission standards are known as the National Emission Standards for Hazardous Air Pollutants (NESHAP). The EPA codified these standards at 40 C.F.R. Parts 61 and 63.

2. 40 C.F.R. Part 63, Subpart A, contains the general provisions for the NESHAP.

3. "Stationary source" is defined as "any building, structure, facility, or installation, which emits or may emit any air pollutant." 42 U.S.C. § 7411(a)(3).

4. "Hazardous air pollutant" is defined as "any air pollutant listed in or pursuant to" Section 112(b) of the CAA, and includes, among other pollutants, lead compounds. 42 U.S.C.

§ 7412(a)(6).

5. 40 C.F.R. § 63.7(e)(3) states that "[...] each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the relevant standard. For the purpose of determining compliance with a relevant standard, the arithmetic mean of the results of the three runs shall apply[...]".

6. Section 112(i)(3) of the CAA, 42 U.S.C. § 7412(i)(3), prohibits any person subject to a NESHAP from operating a source in violation of a NESHAP after its effective date. *See also* 40 C.F.R. §§ 61.05 and 63.4.

The NESHAP for Secondary Aluminum Production

7. Pursuant to Section 112 of the Act, the EPA promulgated the NESHAP for Secondary Aluminum Production at 40 C.F.R. Part 63, Subpart RRR, 40 C.F.R. §§ 63.1500-1520, on March 23, 2000. 65 Fed. Reg. 15710.

8. The NESHAP at 40 C.F.R. Part 63, Subpart RRR, applies to the owner or operators of each secondary aluminum production facility as defined in 40 C.F.R. § 63.1500(a).

9. 40 C.F.R. § 63.1500(c)(1) states that "the requirements of this subpart pertaining to dioxin and furan (D/F) emissions and associated operating, monitoring, reporting and recordkeeping requirements apply to [...each new and existing thermal chip dryer], located at a secondary aluminum production facility that is an area source of HAPs [...]."

10. 40 C.F.R. § 63.1505(c)(2) states that "the owner or operator of a thermal chip dryer must not discharge or cause to be discharged to the atmosphere emissions in excess of 2.50 micrograms (μg) of D/F TEQ per Mg (3.5 × 10−5 gr per ton) of feed/charge from a thermal chip dryer at a secondary aluminum production facility that is a major or area source."

11. 40 C.F.R. § 63.1506(f)(1) states that "the owner or operator of a operator of a thermal chip dryer with emissions controlled by an afterburner must maintain the 3-hour block average operating temperature of each afterburner at or above the average temperature established during the performance test."

12. 40 C.F.R. § 63.1511(b)(5) states that "initial compliance with an applicable emission limit or standard is demonstrated if the average of three runs conducted during the performance test is less than or equal to the applicable emission limit or standard."

Permit to Install

13. On May 6, 1980, EPA approved Michigan Air Pollution Control Commission Rule R336.1201 (Michigan Rule 201), pertaining to Permits to Install, as part of the federally enforceable SIP for Michigan. (45 Fed. Reg. 29790)

14. Michigan Rule 201 states that a person shall not install, construct, reconstruct, relocate or alter any process, which may be a source of an air contaminant, until a permit is issued by the commission. This shall be known as a permit to install (PTI) and shall cover construction, reconstruction, and alteration of equipment where such is involved. A person planning to install, construct, reconstruct, relocate, or alter any process shall apply to the commission for a PTI.

15. Michigan Rule 336.2003 states that "a performance test shall consist of a minimum of 3 separate samples of a specific air contaminant conducted within a 36-hour period, unless otherwise authorized by the department. Each of the 3 separate samples shall be obtained while the source is operating at a similar production level. For the purpose of determining compliance with an applicable emission limit, rule, or permit condition, the arithmetic mean of results of the 3 samples shall apply [...]."

DMI – PTI 41-00B

16. The Michigan Department of Environmental Quality (MDEQ) issued PTI No.: 41-00B (PTI 41-00B), to the Facility on August 22, 2011.

17. Special Condition EU_Dryer.I.1. of PTI 41-00B provides a D/F emission limit for the Chip dryer.

18. Special Condition EU_Dryer.VI.3 of PTI 41-00B states that the permittee shall monitor and record, in a satisfactory manner, the temperature of the operating furnace in FG_G1Furn1&2 used as the emissions control for the exhaust gases from EU_Dryer. The 3-hour block average temperature for the furnace operating cycle shall be maintained at or above the 3-hour block average temperature established during the performance test for the furnace operating cycle.

DMI – PTI 225-10

19. The Michigan Department of Environmental Quality (MDEQ) issued PTI No.: 225-10 (PTI 225-10), to the Facility on December 13, 2010.

20. Special Condition EU_CorePUCB.I.1, 2, and 3 of PTI 225-10 provides PM, PM10, PM2.5, and VOC emission limits for the Phenolic Urethane Cold Box core making process.

21. Special Condition EU_CorePUCB.III.1. of PTI 225-10 states that the permittee shall not operate EU_CorePUCB unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the core making operations, has been submitted within 90 days of permit issuance, and is implemented and maintained. The MAP shall include a pressure drop range for the packed tower scrubber to define proper operation of the control equipment.

22. Special Condition EU_CorePUCB.III.3. of the PTI 225-10 states that the permittee shall not operate EU_CorePUCB unless the packed tower scrubber solution flow rate is 57.5 gallons per minute or more.

Relevant Factual Background

23. DMI owns and operates a secondary aluminum production facility located at 5353 Wilcox Street in Montague, Michigan (the Facility).

24. The Facility is a secondary aluminum production facility and is therefore subject to the requirements of the NESHAP for Secondary Aluminum Production at 40 C.F.R. Part 63, Subpart RRR.

25. On March 26, 2013 (Information Request), EPA issued an information request to DMI pursuant to Section 114 of the CAA, 42 U.S.C. § 7414.

26. DMI submitted a response to the Information Request on May 8, 2013.

27. In response to the information request, DMI provided EU_CorePUCB packed tower scrubber monitoring records. The records provided revealed that the scrubber pressure drop deviated 7.7% of the time the scrubber was operated from the 0.5 to 6.0 inches of water pressure drop range defined for proper operation in the malfunction abatement plan.

28. EU_CorePUCB packed tower scrubber monitoring records also revealed that that the scrubber flow rate deviated 4.3% of the time the scrubber was operated from the 57.5 gallons per minute minimum.

29. In response to the information request, DMI provided an Initial Performance Test conducted on August 6 – 7, 2012. The facility conducted three three-hour PM, NOx, and D/F emissions tests with the Dryer On. The table below summarizes the afterburner temperature during each run:

Run	Date/Time	Furnace Arch Temp (° F)
Run 1	August 6, 2012 12:12 PM – 3:35 PM	1501
Run 2	August 7, 2012 9:16 AM – 12:45 PM	1503
Run 3	August 7, 2012 1:17 PM – 4:35 PM	1296

30. Based on the results of the Initial Performance Test, DMI should have calculated the 3-hour average temperature by taking the arithmetic mean or average of the results of the three runs, which is 1433° F.

31. In response to the information request, DMI stated that the three-hour block minimum temperature at the afterburner was established by taking the lowest 3-hour average temperature from the three 3-hour test runs conducted during the Initial Performance Test, 1296° F.

32. In response to the information request, DMI provided furnace temperature log records for November 16, 2011 through March 31, 2013. These records revealed that on 40% of the days the thermal chip dryer was operating, the 3-hour average afterburner temperature was not maintained at or above 1433° F.

Notice and Finding of Violations

33. By failing to maintain the 3-hour block temperature of the afterburner above the minimum temperature established during the performance test, DMI violation 40 C.F.R. § 63.1506(f)(1) and Special Condition EU_Dryer.VI.3 of PTI 41-00B and failed to demonstrate continuous compliance with 40 C.F.R. § 63.1505(c)(2) and Special Condition EU_Dryer.I.1. of PTI 41-00B.

34. By failing to maintain the pressure drop for the packed tower scrubber within the water pressure drop range defined for proper operation, DMI violated Special Condition EU_CorePUCB.III.1. of PTI 225-10 and failed to demonstrate continuous compliance with Special Condition EU_CorePUCB.I.1, 2, and 3 of PTI 225-10.

35. By failing to achieve the packed tower scrubber solution minimum flow rate, DMI violated Special Condition EU_CorePUCB.III.3. of the PTI 225-10 and failed to demonstrate continuous compliance with Special Condition EU_CorePUCB.I.1, 2, and 3 of PTI 225-10.

Environmental Impact of Violations

36. DMI violations may have resulted in increased emissions of D/F and DMIPA.

37. D/F can cause a number of health effects. The most well known member of the D/F family is 2,3,7,8 TCDD, which is suspected of being a cancer causing substance to humans. In addition, people exposed to D/F have experienced changes in hormone levels. Animal studies show that animals exposed to D/F experienced changes in their hormone systems, changes in the development of the fetus, decreased ability to reproduce, and suppressed immune system.

38. DMIPA exposure may cause severe irritation to the respiratory tract. Sensitive persons may experience cough, wheezing, laryngitis, headache, nausea, vomiting, bronchitis, and pulmonary oedema. Medical conditions that may be aggravated by exposure to this material include lung disease or limited respiratory capacity.

12/22/13
Date

George T. Czerniak
Director
Air and Radiation Division

CERTIFICATE OF MAILING

I, Loretta Shaffer, certify that I sent a Notice of Violation and Finding of Violation, No. EPA-5-14-MI-05, by Certified Mail, Return Receipt Requested, to:

Kevin Jacko
Plant Manager
Diversified Machine Inc.
5353 Wilcox Street
Montague, Michigan 49437

I also certify that I sent copies of the Notice of Violation and Finding of Violation by first-class mail to:

Heidi Hollenbach
Air Quality Division Grand Rapids District
Michigan Department of Environmental Quality
State Office Building, 6th Floor
350 Ottowa Avenue NW, Unit 10
Grand Rapids, Michigan 49503

On the 30 day of December 2013.

Loretta Shaffer

CERTIFIED MAIL RECEIPT NUMBER: 7009 1680 0000 7669 6388